

CHAPTER 1 DVR2 Features, Options, and Baseline

1.1 Introduction

Volume I provides a general description of the Digital Voice Recording System Series 2 (DVR2) baseline configuration.

This volume contains the following chapters:

1. DVR2 DRU Baseline and Options
2. Software
3. Ancillary Equipment and Troubleshooting Tips
4. Parts List
5. Drawings

1.1.1 DVR2 Configurations - DVR2 comes in three distinct system configurations; the one-rack system with a single digital recording unit (DRU), the one-rack system with two DRUs, and the two-rack system housing up to three additional DRUs.

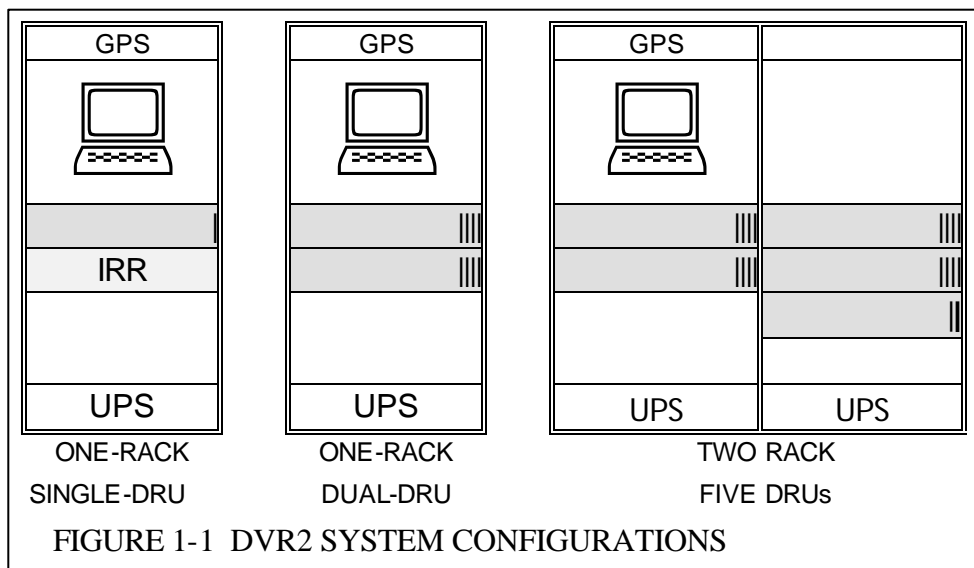
The one-rack, single-DRU system configuration is composed of the DVR2 workstation, one DRU containing up to four 24 channel modules for a total of 96 recording channels, and the integrated reproducer (IRR).

The one-rack, dual-DRU system configuration is composed of the DVR2 workstation, two DRUs for a maximum capacity of 192 recording channels, but without the integrated reproducer.

The two-rack system configuration includes a second rack housing up to three DRUs in addition to the above dual-DRU system for a maximum capacity of 432 recording channels.

1.1.2 Remote Reproducer - An optional stand-alone remote reproducer (RR) is available upon request. The reproducer is functionally equivalent to the DVR2 recording system except for the lack of the recording function. It is equipped with a complete workstation, a DRU, and a dual two-track cassette recorder/player for re-recording and playback of DAT tapes.

1.1.3 Ancillary Equipment - Other optional ancillary equipment includes the Global Positioning Satellite (GPS) receiver and antenna system and the Uninterruptible Power Supply (UPS).



1.1.4 Product Specifications

System Functions:	Digital voice recording for telephone and radio communications.
Recording Channels:	24 to 96 analog input channels per chassis scalable upwards to thousands.
Radio Line Interface:	Impedance = 600 Ohms.
Telephone Line Interface:	Impedance > 30k Ohms.
On-line Voice Storage:	128 to 700 channel hours. 500 channel-hours for each digital audio tape (DAT) cassette. 30 seconds search time (typical). Continuous or redundancy mode operation.
Frequency Range:	300 – 3400 Hz
Signal-to-Noise Ratio:	Larger than 40 dB for 64 Kbps sampling.
Voice Processing:	Sampling in accordance to CCITT G.711& G.712. At 64 Kbps PCM (A-law) At 32 Kbps PCM (CCITT G.726) At 16 Kbps PCM (CCITT G.726)
Audio Output:	Line output connection to external speaker or headphones. Telephone output - active connection to telephone line.
Physical Dimensions:	Dimensions per 96 channel chassis Width: 19 inches Depth: 21 inches Height: 7.0 inches Usually installed in a standard 19-inch rack.
Environmental Conditions:	Operating temperature: 10 to 40 degrees C Storage temperature: 0 to 50 degrees C.
Power:	115 VAC, 60 Hz, 200 Watts.

1.2 DVR2 Recorder Baseline Configuration

ITEM	QUANTITY
Recorder Equipment	
Workstation With Alarm Card	1
Workstation Software Including:	
Microsoft Windows 95	1 (1 CD ROM)
Workstation Installation Package 7.554	1 (1 CD ROM)
Remote Alarm	1
Speaker System	1
Ethernet LAN Hub	1
Recorder Software Requirements	
MS-DOS 6.22	1 (3 diskettes)
Quarterdeck Expanded Memory Manager 7.5	1 (2 diskettes)
Communication Package	1 (1 diskette)
Installation Package 7.66	1 (1 diskette)
Recorder	
Chassis	1
Power Supply	1
Backplane / System Board	1
Floppy drive (3.5" 1.44MB)	1
Mirroring Device	1
Hard Disk Drive	2
DAT Drive	1
CPU 80486 100 MHz 16 MB RAM w/VGA Circuit Card Assy.	1
Ethernet LAN Circuit Card Assembly	1
Ancillary Equipment	
GPS Receiver/Antenna	1
UPS or Power Conditioner ¹	1

The following options are available (but not necessarily used):

- a) Warning Tones
- b) External Alarm
- c) LAN Recorder to Reproducer Interconnect
- d) Audio Bus Recorder to Reproducer
- e) High Impedance Telephone Interface
- f) Two Output Channels

¹ A UPS system will be provided to facilities utilizing an essential power bus. A line conditioner will be provided to facilities utilizing the critical power bus.

- g) Level Detection
- h) External Detection
- i) On / Off Hook Detection

1.3 DVR2 Standard backplane Slot placement (left to right when viewed from rear):

CCA Chassis Allocation

Slot No.	CCA Type
1	CPU w/VGA
2	SCSI
3	Ethernet
4	LAF I/O
5	LAF
6	APA
7	Fourth ALI (Optional)
8	Fourth ADIF (Optional)
9	Third ALI (Optional)
10	Third ADIF (Optional)
11	Second ALI (Optional)
12	Second ADIF (Optional)
13	First ALI
14	First ADIF

1.4 DVR2 Reproducer Baseline Configuration

ITEM	QUANTITY
Reproducer Equipment	
Cassette Recorder	1
Time Code Generator Reader	1
Speaker	1
Workstation Without Alarm Card	1
Workstation Software Including:	
Microsoft Windows 95	1 (1 CD ROM)
Workstation Installation Package 7.554	1 (1 CD ROM)
Ethernet LAN Hub	1
Reproducer Software Requirements	
MS-DOS 6.22	1 (3 diskettes)
Quarterdeck Expanded Memory Manager 7.5	1 (2 diskettes)
Communication Package	1 (1 diskette)
Installation Package 7.66	1 (1 diskette)
Reproducer	
Chassis	1
Power Supply	1

Floppy drive (3.5" 1.44MB)	1
Hard Disk Drive	1
DAT Drive	1
CPU 80486 100 MHz 16 MB RAM w/VGA Circuit Card Assembly	1
Ethernet LAN Circuit Card Assembly	1